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THE GEOGRAPHY OF HISTORY: A REVIEW*

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The World War of 1914-1918 and the Peace Conference which followed demonstrated with a clearness previously unknown that a knowledge of geographic facts and principles is fundamental to any adequate conception of the great problems of war and peace. The relative importance of the rôle which geography plays in history had long been debated, both in this country and abroad; and important works dealing with the "geographic basis" of history had been published in our own and other languages years before the cataclysm of 1914 burst upon the world. But it was the clash of whole nations in arms which revealed the true military value of efficiently mobilized scientific knowledge, including geographic knowledge; and it was the clash of national interests at Paris which exposed at the bottom of nearly every controversy a geographic foundation. That the lesson of these facts has not been lost to the world is obvious, for the man who speaks on problems of military geography or political geography enjoys a far wider and more attentive hearing today than he did eight years ago.

To no one dealing with the relations of geography to man and his activities, will a more respectful hearing be accorded than to Jean Brunhes, the distinguished author of "*La géographie humaine*" and professor at the Collège de France. When he speaks in collaboration with one best known for his writings on "*Géographie sociale: La mer*" and "*Le sol et l'état*," Camille Vallaux, his words must carry added conviction. The joint work of these two authors is in reality two volumes in one. The first is a general treatise on the relations between geography and history; the second is mainly a discussion of the World War and the problems arising from it, considered from the geographic point of view. It appears that the first was largely completed in substance, if not in its present form, before 1914; while much of the second is necessarily of later origin. It will not be inappropriate, therefore, if we confine our attention to the more general first part of this important work. The present writer will attempt the by-no-means easy task of translating into a few pages the chief argument of these two eminent geographers and will then append to this digest certain comments.

Synopsis of the Work

If the distribution of towns and cities, of roads, railways, cables, and canals, and of all the other products of man's activities throughout the ages

* Jean Brunhes and Camille Vallaux: *La géographie de l'histoire: Géographie de la paix et de la guerre sur terre et sur mer.* ii and 716 pp.; maps, diagrs., index. Félix Alcan, Paris, 1921. 10 x 6½ inches.

is geography, then certainly man in making history on the earth makes also geography. History, in other words, translates itself in geographic terms; and the great geographic facts of today are not the discoveries of the North Pole and the South Pole, but such events as the piercing of the Isthmus of Suez and the opening of the Panama Canal. On the other hand, geography translates itself in history. A high, flat-topped mesa, bordered by precipitous slopes and surrounded with a protecting belt of marshland, becomes the advanced bulwark of Christianity in the north of Gaul, an impregnable islet escaping the ravages of the Vandals, the refuge of the last Carolingians, a fortified city playing an important rôle in many wars. Can one doubt that the exceptional topography of Laon predestined it to figure as a stronghold from the earliest days of history? So also the unhindered exploitation of great natural lines of communication, like that of the Hudson-Mohawk depression, means rapid progress in the peaceful development of the adjoining regions; while the artificial blocking of such a route, as exemplified in Austria-Hungary's attempt to render Serbia commercially dependent on the Dual Monarchy by closing the natural pathway forming Serbia's direct outlet to the sea, can only end in one of those historical crises in which geography takes revenge against unnatural political doctrines.

MAN THE CHIEF GEOGRAPHIC AGENT

The interrelations of geography and history, barely touched upon in the preceding paragraphs but treated at some length by Brunhes and Vallaux, lead naturally to the discussion of men as geographic agents. In modifying the surface of the earth the sixteen hundred millions of human beings continually active upon it are far more important, in the opinion of our authors, than are the physical agents of nature such as volcanoes, glaciers, and rivers. This because of the vast scope of man's activities, his remarkable adaptability to varying physical conditions, and the infinite variety and incalculable number of his acts which in their totality profoundly and ceaselessly affect land areas; and especially because, as Woeikof has accurately remarked, man has power over the *movable things* on the earth. He can control the moving waters, dam them, change them into other forms of power, lead them in canals to serve as means of transport or to irrigate his fields. Agriculture depends on his control over the surface layers of the lands, his ability to break and move them, to remove some elements and add others. Road construction, house building, mining, manufacture involve the breaking in pieces and putting together again of the movable things on the earth. It is his power over these things which makes man of interest not only to the ethnographer, the historian, the statistician, but also to the geographer who sees in him the most important of all geographic agents.

Having established that geography and history are intimately related and that in considering their inter-relations we have to deal with man as the most important geographic agent, we turn naturally to the earliest human

records as the proper beginning of a study of "the geography of history." Here we have to note that the student of prehistoric records can no longer be satisfied with an attempt to discover successive stages of ancient civilizations superposed one above the other, and thus to establish a chronology of man's development in time; he must study the extension of these civilizations over the earth's surface, as affected by differences in climate, fauna, flora, and other environmental factors, at a time when man was far more dependent upon his physical surroundings than he is today. In the same way the earliest written history, those confused records of groups of men which constitute the dawn of history, can only be understood and rendered more precise when interpreted in the light of geography. The history of Greece and of Greek art is not fully intelligible unless one studies its beginnings with a true understanding of the peculiar physical environment formed by the island-studded eastern Mediterranean and its labyrinthine coasts, where the sea rather than the land formed the highway of human movements.

PRECAUTIONS REQUISITE IN GEOGRAPHIC INTERPRETATIONS

"Prehistory" and "protohistory" (early history) are succeeded by history proper, with its ever-increasing wealth of facts requiring analysis, classification, and interpretation. In this work the rôle of human geography is highly important. But the geographer must exercise care in making his interpretations, for, while many social facts have a geographic basis, it is equally true that many facts apparently geographic in origin depend upon wholly artificial social or psychological causes. Differences in the agriculture of two states may depend upon differences in the laws regulating the distribution of land rather than upon differences of soil, climate, or other physical factors. Care must also be taken that interpretations are not invalidated through failure to determine the statistical value of geographic facts. How many travelers judge a race by one accurately measured individual, or describe a people as hospitable after having been well received by the inhabitants of a single place! In geography it is not the exceptional fact but the usual fact, not the weight of an unusual stalk of wheat but the number of bushels produced per acre, not the rare specimen of mineral but the average run of the mine, that is of value. Finally, we must realize that what appear superficially as purely physical geographic facts, exercising a more or less fatalistic determination upon the acts of human beings, are often of significance only in relation to certain aspects of a changing human psychology. A river or a mountain is a "natural frontier" only when we have such and such economic and political conceptions of a frontier; and these conceptions change profoundly in the course of history. The "economic geography" of a given region may be greatly altered by the psychological fact of man's directing his attention to a new method of culture, as when the development of "dry farming" in parts of the western United States gave the same results as would a doubling of the local rainfall.

With the foregoing precautions in mind, the authors examine from the geographic point of view: (1) certain aspects of the distribution of agricultural products and man's progress in developing improved methods of agriculture; (2) the distribution of population over the earth and the causes of changes therein; and (3) the distribution and development of organized states (political geography). The object of this examination is to demonstrate that social history is solely determined neither by economic history nor by political history, but depends in an important measure upon geographic factors. Let us consider first the problem of population distribution.

UNEQUAL DISTRIBUTION OF POPULATION

Men are very unequally distributed over the face of the earth, sparsely scattered here, densely concentrated elsewhere. The mere matter of numbers is one of the sovereign laws of history; for the degree of concentration of men determines the force of resistance of certain great groups—as in China; the force of expansion of others—as in Europe. The world's population has increased by fifty per cent in the last century, a prodigious rate which is unknown in previous history and which has taken place largely in the European population or populations of European extraction; whereas the other two great centers of population—China and India—have remained stationary, and intertropical Africa has actually witnessed a decrease. Were geography, in its narrower conception, the determining factor in the distribution of men, we should expect the densest populations always to be found where nature offers the most abundant and most easily procured resources for food, shelter, and commerce. As a matter of fact, vast exposures of fertile lands with favorable climate remain little occupied, while at the same time many rocky lands with scanty, infertile soil and rude climate are peopled more densely than natural conditions warrant. Furthermore, where geographic conditions have remained sensibly unaltered, we not infrequently see today a scanty population where formerly great numbers lived. Evidently no geographic condition can in itself explain the extreme inequality in the distribution of men.

ZONES OF PASSIVE CONCENTRATION

If we examine the present zones of densely concentrated population we find them to be of two types: (1) zones of *passive* concentration, like China, India, Egypt, and the Sudan, "lands of water and sun," where the number of the population depends in great measure upon natural geographic conditions, and where these conditions favor not laziness, but limited and incomplete human effort; and (2) zones of *active* concentration, like parts of Europe and North America, where, natural conditions being on the whole unfavorable, the struggle for existence stimulates and invigorates men and favors their multiplication in order to provide additional means of over-

coming the difficulties which confront them. The relation of density of population to geographic conditions in a country of the first type is well illustrated by comparing three maps of India showing the rainfall, the culture of wheat, rice, and millet, and the distribution of population. These three maps correspond with an exactitude most remarkable. The term "passive concentration" is appropriate for countries like India and China, for in them the human plant thrives *in situ*, as in a favorable soil; and the population of these two countries, together accounting for almost half the people on the globe, has remained relatively stable throughout history, receiving little influx from outside and contributing little to the rest of the world. The limits of the population of India are almost as fixed as are the country's geographic limits—the Himalayas and the Indus. Nowhere have the Indians pushed outward, not even upon the ocean, which, although called Indian Ocean, has been successively Arab, Portuguese, Dutch, Franco-English, and now British, but never Indian. The expansion of the Chinese, while great when compared with the more stationary India, has been slight and slow as compared with the movements which peopled Europe and America.

ZONES OF ACTIVE CONCENTRATION

In the zones of active concentration we find the population increasing as a sequel to man's struggle against the sea, against the forest, against the steppe. First it was the inland seas and the marginal areas of the greater oceans that witnessed the struggle. In so far as man drew his living from marine animals, the distribution of which depends in turn upon the temperature, depth, and movement of the sea water, he was subject to geographic limitations; and the early distribution of maritime populations in the northern hemisphere is believed to have resulted mainly from the thermal contrasts of warm and cold ocean currents and from the climatic and biological phenomena to which these contrasts give rise. But it was the struggle against the hardships of the fisherman's life that developed vigor in the population and increased its fecundity. Today it is the great ocean and maritime commerce, rather than marginal seas and fishing, that are responsible for the active concentration of population in the favored zones; for maritime commerce is a more powerful factor in drawing together in cities men from all parts of the world than ever were the great industries of "the age of coal."

The forest also invites an active concentration of population by virtue of the hardships it opposes to man, and both in Europe and North America great populations now live where once spread a wilderness of trees. In the struggle to clear the land not only are man's energies effectively developed, but an abundant offspring is necessary in order to provide more hands to conquer and cultivate the soil. Hence the forest zone of severe life conditions is peopled more rapidly than the steppe, where man is content to live in com-

parative ease a pastoral and more or less nomadic existence. Today, with the ancient forests largely conquered, population begins to increase more rapidly in the regions of steppes; but only because there is now more land available in these regions, and because the proper cultivation of the soil is there more recent.

INFLUENCE OF WATER SUPPLY AND COAL SUPPLY ON POPULATION

Another important factor in influencing the distribution of population is the water supply. This factor is not of consequence in the "lands of water and sun," where water, like the sunshine, is everywhere abundant. But elsewhere it determines whether the people shall be strung out along river courses, or concentrated in zones where common effort establishes a complex system of irrigation, or clustered more compactly about deep and therefore costly wells dug at the common expense, or scattered widely in little hamlets and isolated farms served by innumerable shallow and inexpensive wells. These conditions of living react upon the fecundity of the people, and hence still further upon the density of population.

The vast industries based upon the exploitation of coal in the last century have profoundly affected the distribution of men and in Europe have led to an active concentration of population in a zone adjacent to the belt of coal deposits extending along the fiftieth parallel from the Atlantic on the west to the great steppes of the east. But, contrary to the common explanation of economists, the concentration is not due simply to an influx of men from rural communities, attracted by the large salaries offered in the industries. The division between the rural population and the industrial laborers remains fairly distinct; the workmen are most often sons of workmen, for the laborers in no wise limit their offspring during the youth and maturity of industrial development. As a result the birth rate among laboring classes for a long time exceeds that of the rural population, as it formerly did in France and England, and still does in Germany. Further supplies of labor, above that furnished by the children of laborers, must for a long time be imported from a distance, for the rural population leaves the land for mine and factory very slowly and with many misgivings.

URBAN CONCENTRATION AND NORTHWARD MIGRATION

Two striking phenomena of the concentration of the white population of the world are, on the one hand, the ever growing tendency for men to leave the small and middle-sized towns for the great cities and, on the other, a gradual northward movement of the centers of maximum population. In prolific Germany, where the population has risen since 1871 from 40,000,000 to 68,000,000, the figure for the rural population has remained stationary at about 25,000,000. In France and England the cities continue to increase in size while the rural districts remain stationary or actually suffer a loss. In

the United States the relative proportions of rural and urban populations change yearly in favor of the urban population. Equally true, but so gradual as to be almost imperceptible unless we consider long periods of history, is the northward migration of urban populations coincident with the shifting of economic and political power in this direction. At an early epoch we find Thebes, Memphis, Babylon, and Nineveh situated between latitudes 25° and 36° N.; later Byzantium, Carthage, Rome, Athens, Cordova, and Toledo, from 33° to 42° ; and now Paris, London, Vienna, Berlin, Petrograd, and Stockholm, from 48° to 60° .

MOVEMENTS NOT EXPLAINED BY GEOGRAPHIC FACTS ALONE

If we turn our attention from the "facts of fixation" of population, considered above, to the "facts of movement," we must first have care not to attempt to explain human movements simply on geographic grounds. A brief study convinces us that people do not, for example, move from places where the natural facilities for existence are insufficient, to places where such facilities are superior. On the contrary, one may observe dense populations continue the struggle for existence and constantly increase in numbers where neither the soil, commerce, nor the industries make true well-being possible; while other regions, marvelously endowed in natural resources and in the accumulated products of human toil, not only are sparsely populated but continue to lose numbers through an insufficient birth rate or emigration and most often through both causes at once. The true explanation for such phenomena often lies in the fields of economics or psychology rather than in that of geography. Desire to avoid that subdivision of the ancestral property which results from having many children, an exaggerated love of easy living and a dislike of heavy toil, feminine aversion to suffering and the desire to keep intact cash capital as well as land combine to lower the birth rate and thus cause depopulation of rich lands like those of Normandy. In other parts of France rich country regions are in time deserted because the lure of the city eventually draws to it some of the most active spirits, who become artists, politicians, statesmen; and the rest follow in their wake, content to perform the most menial tasks in the city rather than till the soil. Elsewhere it may be political disorders, poor distribution of lands, or social causes which incite masses of men to migrate. In still other cases the movement clearly has a geographic basis. The discovery of valuable mineral deposits, the exploitation of forests, famines due to failure of rains, overpopulation of sterile lands incapable of yielding an adequate food supply either draw people to the favored localities or expel them from the unfavored. But we hesitate to explain the invasions of the barbarians and the great migrations of Asiatic hordes from east to west, either, like Kropotkin, by the gradual desiccation of central Asia, or, like Huntington, by oscillations of wet and dry periods. The desiccation has not been sufficiently accentuated, nor have the climatic oscillations been sufficiently pronounced, to change

radically the conditions or manner of living in Asia; and so long as the manner of living may remain the same, there is no natural reason for an exodus *en masse*.

MIGRATION ROUTES

If geography fails to explain many major facts in the movements of men, it at least has a special interest when we come to study the routes of those movements. Migrating masses have a tendency to avoid obstacles and to seek the natural passages opened by nature. Yet even in this part of our study we must observe caution, and note that this law is strictly true only when men are poorly equipped to contend against nature and are spread over a region lacking proper transportation routes and adequate protection for the individual.

In earlier days the main obstacles to human movements were mountain masses, deserts, forests, marshes, and the open sea. But the routes followed by migrating peoples were not merely, nor principally, the routes best calculated to avoid these obstacles. They were also of necessity the routes along which they could best *eat*; for food for such numbers could not be carried with them. Chief among these routes were the grassy steppes, usually bordering the deserts, where there was water enough for man and grass for his herds, and where the trees were not numerous enough to hinder the movement of the mass. The great migrations of early history were thus migrations of pastoral peoples and temporary farmers, who lived in tents, led their flocks with them, and lightly tilled the soil for a single season before moving on. A second type of migration route was formed by the margins of the seas. Here boats and fish replaced the herds of the steppe, and the life of the trader and fisherman differed widely from that of the pastoral nomad. Phoenicians and Greeks, following the borders of the Mediterranean; Scandinavian and German traders, warriors, and pirates, skirting the shores of north European seas—give us examples of sea-border migration. Finally the rôle of great rivers as routes of early migration, while a subordinate one, deserves mention. Today conditions are so far changed that the open sea, once the most formidable of obstacles, is become the great route of movement for masses of men.

DEVELOPMENT OF THE STATE

Having considered mankind first in its work of stabilization and exploitation of the soil, and then in its movements from place to place, we must next turn our attention to the three fundamental problems of political geography: (1) the territorial expanse of the state, (2) lines of communication and the frontier of the state, and (3) the capital of the state.

Possession of a certain expanse of territory is a primary condition of the formation of a state. The political association is born of the necessity of collective security, and this necessity appears only when men, appropriat-

ing territory and exploiting it to meet their needs, feel that they have a common patrimony to defend. Absolute and complete nomadism prevents the formation of a state. Another primary condition is a certain minimum density of population. There must be, among the men composing the group, sufficient intercommunication for the need of common security to be felt and for the organization of that security to be possible; and this does not exist where men are too thinly scattered. There must also be, in close proximity, other groups that are enemies or rivals, or capable of becoming such, which are likewise able to form states; for only thus does the need of security against outside attack become apparent. The state *se pose en s'opposant*. Hence arises the importance of the geographic conception of "position." The Eskimos occupy permanently no territory, have not the requisite density of population, nor the contiguity of opposing groups that would enable them to form a state.

Even when the conditions requisite for the formation of a state exist, the development of the state does not always meet with the same degree of success. In some places one state after another is born, quickly rises to power, and then dies, new states always rising from their ashes. Elsewhere development of states is slow and incomplete, and the groups composing them apt to come under the influence of their more vigorous competitors. We may call these the *active* and the *passive* political regions, and a study of them in their historical development, in order to determine how far geographic conditions are responsible for their marked differences, gives highly interesting results. It shows us, for example, that no state or group of states can exist without an active struggle within the state or between states. Political societies may live in peace, in the ordinary sense of this word; but they cannot live in repose. This constant struggle changes, not merely from year to year but from day to day and even from hour to hour, the map of the world—not the map as we are able crudely to represent it but the real map which would show, if we could but draw it, the actual political and social life of human groups at any given moment of their ever-changing existence. The historical maps to which we are accustomed give an appearance of temporary stability followed by sudden and often great changes, which has little relation to the never-ceasing progressive changes taking place.

The changes just referred to involve, among other things, an obedience of most large political societies to a "law of increasing agglutination." Great states grow from small nuclei by successive incorporations of adjoining small states which have neither sufficient internal cohesive force nor sufficient expansive force to maintain their autonomy. But, while this is a general law, it is not, as Ratzel and other Germans would have us believe, a necessary and universal law. In the political geography of Ratzel one sees the fate of Belgium and Serbia fixed in advance and reads the full meaning of that author's statement that "Europe and Australia really have room enough for but one great power."

POLITICAL SIGNIFICANCE OF LINES OF COMMUNICATION

The second fundamental problem of the state is to assure the cohesion of the parts which constitute it, and to establish upon its periphery a permanent defense against interference from without. Of these two objects the first is realized through *lines of communication*, the second by means of a *frontier*. Lines of communication are not commonly regarded in this light, so greatly has their secondary use for economic purposes obscured their primary purpose. This is natural, for in times of peace we see water routes, roads, railways, and telegraph lines serving the free movement of men, goods, and thoughts. Only in time of war does the primary purpose of these routes become evident, and only then do we realize that their most essential characteristic is *permanent security of passage*, obtained by removing material obstacles, maintaining a proper upkeep, and furnishing adequate police protection. Security of passage throughout its parts is essential to the cohesion of the state, and state supervision of lines of communication is one of the clearest proofs of political possession of the land. The great central artery of the Persian Empire which, significantly enough, coincided for long distances with the route of the Bagdad railway, and the network of roads which bound together the component parts of the Roman Empire are familiar illustrations in which the political significance of lines of communication is clearly apparent.

FRONTIERS

In studying the frontiers of states we must first rid ourselves of the false notion that the frontier can be a line. Frontier zones are realities, the frontier line is only an abstraction. Every true frontier is a zone more or less completely organized for military and economic defense against the neighboring state. In this zone are concentrated the pressures and counterpressures inevitably resulting from the struggle for existence of two organized peoples. Those misguided individuals who hope to realize Utopian ideals by abolishing boundary lines between nations fail to understand that such lines are not created by statesmen to limit the freedom of peoples but represent attempts to define and locate an inescapable reality. If the line were abolished, together with its associated military posts and custom-houses, the zone of pressure and counterpressure between the two peoples would remain unaffected and would soon compel the recreation of the things abolished. Where there is active tension in the frontier zone, the boundary line is apt to change with comparative frequency to meet the changing balance of forces. But if the tension is relieved, through the decadence of one of the states or its expansion in other directions, we may have a *dead frontier*, one with little tendency to change. Before the Treaty of the Pyrenees in 1659 the Franco-Spanish frontier suffered frequent changes in position; since that date and the fall of Spain from its place as a great power there has been no tension, and it has not even seemed worth while to correct the obvious blunders of the negotiators of that treaty.

The study of European frontiers shows their gradual transition from wide and little-inhabited zones between peoples, through a second stage in which the vacant zone remains on the side of the more barbarous people but is replaced by a protective wall or line of fortifications on the side of the more advanced state; then through a third stage in which there is no vacant zone but a chain of more or less detached fortified points, between which the two peoples interpenetrate each other most irregularly, with numerous enclaves of one group isolated within the other; finally reaching the fourth stage in which the more perfect internal organization of each state is reflected in a relatively simple and wholly continuous frontier between them. Such a study also convinces us that since neither rivers nor mountains serve as protective barriers to prevent the passage of armies, they do not constitute "natural frontiers." Practically there are, aside from the open sea, no natural frontiers between vigorous states.

THE STATE CAPITAL

Just as there can be no state without lines of communication to bind its parts together and a frontier zone to protect it from outside interference, so also there is no state without a central organ, the capital. This is the third primary necessity for the existence of a state. The capital is the thinking head of the state; hence the disaster which threatens a nation if its capital is captured in time of war. State capitals are *natural* when they are established in pre-existing cities located where natural conditions favored their development; they are *artificial* when created where no urban development had previously taken place. When a pre-existing city is chosen as a capital, it is because in addition to its other natural advantages it possesses that of a favorable geographic *position*. Paris is the type example of natural capitals. Artificial capitals depend solely upon the advantages of position, and Petrograd, whose *site* is most unfavorable but whose *position* is admirable, was the best example. The government of Lenin has abandoned the artificial capital in favor of the natural capital of Russia (Moscow), and Petrograd is now in full process of decay. A study of the capitals of the world also shows us that about half of them are located on the sea or in close connection with the sea; and that for other reasons many capitals occupy a markedly eccentric position with respect to the territory of the nation and even with respect to the distribution of its population.

POLITICAL GEOGRAPHY OF THE FUTURE

If now we review the actual facts of political geography that we have thus far been considering and take into account those facts with which mankind will certainly have to deal in the near future, we can with some assurance predict certain aspects of the political geography of tomorrow. There is no essential geographic characteristic of the state which is not destined to

undergo profound alteration as a consequence of continued improvement in means of transport. The capitals, already overcrowded, will become more crowded still; recruiting their populations from afar, they will become ever more cosmopolitan and denationalized. Since acceleration of transport acts in effect as a reduction of distance, the size of states and the effects of size upon the cohesion of the component parts will progressively change. Such changes must in turn react upon the economic and social life of peoples.

One result of these changes will be to bring into existence in the future larger political organizations than the simple and homogeneous states which we know today. A common civilization, involving perhaps common traditions, a common mother tongue, a common religion, identical or analogous institutions, or only certain ones among these unifying forces, will lead different states to unite in a co-operative federation, either for the purpose of equalizing among themselves the conditions of existence or in order to resist successfully the growing pressure or violent attacks of other groups. The organization of these federated states will have little resemblance to the temporary alliances of the past. Such alliances have, until a very recent date, usually been concluded between two powers only. Under the growing pressure of new geographic facts an alliance between a group of powers has become more common. In the future the co-operation will be far more close, and individual relations between powers will be rare. The relations themselves will profoundly change and, instead of being directed, as in the past, largely toward securing an equilibrium of forces, will seek to achieve in addition an equilibrium in the distribution of raw materials and manufactured products destined to satisfy the needs of the peoples concerned. No nation will in the future be economically independent; and, since power rests on economic wealth, the states must gather into groups in order to combine those resources essential to great power. That these federations of states will be more permanent than the alliances of the past cannot be doubted, for they will be founded on geographic conditions far more stable than the military strength and moral elements which served as bases for the old alliances. Boundary lines will change less often, wars will become more difficult and dangerous and hence of rarer occurrence. But this gain to humanity may be more than offset by an increase in their devastating fury when they do occur.

A LEAGUE OF NATIONS IMPOSSIBLE

It might seem that the logical end of the coming increased co-operation among nations would be a league of nations, composed of all civilized peoples and organized to make war impossible. Such reasoning is not justified. The essential aim of a league of nations, to make a final and lasting division of the earth's surface among the peoples of the world and to maintain thenceforward all frontiers inviolate, is impossible of achievement; because a perfect equilibrium, even if it could be once established, would

not endure. The great forces of political geography would destroy it. If the league of nations tried to take account of changing forces, it would find the task too delicate and difficult. The logical end, and the one best adapted to the realities of the present and of the future, is not a universal league of nations, but groups of federated states in unstable equilibrium accommodating themselves to changes in politico-geographical conditions.

Comments

Thus far Brunhes and Vallaux. This digest of their argument is necessarily incomplete and imperfect, but it may be sufficient to indicate the wide range and compelling interest of their work. It remains to comment on certain phases of their treatment. The reader will appreciate the few maps and diagrams that illustrate the text. Nothing could be more effective than the series of diagrams (Figs. 2-5) showing graphically how improved means of transport have in effect caused France to shrink to a tiny fraction of its former size, changed Corsica to half its size and brought it within one-third its former distance from Marseilles, narrowed Dover Strait by two-thirds, and reduced the breadth of the Atlantic Ocean by more than three-fourths, bringing New York and Le Havre within 162 hours of each other instead of 734 hours as formerly. One could wish that the text were illuminated by more illustrations, for its value would thereby certainly be increased.

Two characteristics of the text leave a strong impression upon the reader. One is a certain lack of clearness, due possibly to the very wealth of material presented. To put a geographic statement in its proper setting requires, perhaps, a brief sentence touching on some related, though distinct, theme. But this sentence raises in the authors' fertile minds additional corollaries or examples, and the sentence becomes a paragraph or several paragraphs. The reader is interested but he is also diverted; and the logic of the argument is sometimes obscured. The second impression is that produced by the authors' commendable care not to overvalue or overemphasize the rôle of geography in history. The reader is repeatedly cautioned against the danger of attempting a simple geographic explanation for historical events, and emphasis is placed on the fact that much harm has resulted when over-enthusiastic geographers have sought to explain events from the geographic viewpoint alone, or to assign to geography too great a rôle in history or a rôle too simple and determinative. "The earth certainly controls human activity; but man in turn controls the earth."

It would not be fair to expect that in the subject matter of a work covering so wide a range of human interests as does "*La géographie de l'histoire*," the authors should escape grounds for criticism. In places the careful reader will follow the authors with doubt and misgivings, or feel that he cannot follow them at all. He may, for example, question the geographic quality of cathedrals, even though they are situated on the earth's surface, and can

be represented on maps. Similarly the geographical element in the history of the improvement of the cabbage and the diversification of its types by careful selection and cultivation may escape him, as also in the influence of religious laws and customs on what people eat. But perhaps this is, after all, a matter of definition; and if the reader accepts Brunhes' definition of human geography as explained and illustrated in his "*Géographie humaine*," then he cannot question the propriety of treating these things in "*La géographie de l'histoire*." He may still wonder, however, whether in attributing important geographic consequences to "the struggle between the warm waters and the cold waters, the blue waters and the green waters" of the ocean (pp. 150-152) the authors have not, in the first place, overlooked physical characters of the ocean, such as differences in depth, differences in oxygen content of shallow and deep waters, differences in salinity, in suspended sediment, in quantity of microscopic plants and animals, and other factors, some of which affect the observed color differences as well as does temperature, and others of which may profoundly influence, directly or indirectly, the distribution of food fishes and hence man's activities; and whether they have not, in the second place, undervalued geographic factors vastly more important than the temperature contrasts of these waters when they make of them "the essential and determining forces" in the distribution of maritime populations.

TREATMENT OF FORESTS AND STEPPES

When the authors make a mystery of the fact that forested areas are populated more rapidly than steppes (pp. 166-190) and then seek to explain the mystery by showing that, although life on the steppe is easy and comfortable (*sic*) and that in the forest is laborious and trying, the very wealth of effort required to overcome the forest breeds energy and provokes an increase in population—we are quite unable to follow them. There is no mystery in the obvious fact that man tends to populate most rapidly those portions of a new country where rainfall is sufficiently abundant for him to grow plenty of food for his needs (such areas are apt to be forested) and avoids those areas where hard experience teaches him that the rainfall is too scanty to permit the raising of crops (such areas include the steppes). If a region of fairly abundant rainfall happens to be treeless or but scantily forested, and other conditions are favorable, man passes by the forested lands and presses painfully onward to where the conditions of life are easier, as was the case in the rapid populating of our prairie plains when their potentialities had once been realized. On the other hand, if topographic or soil conditions make life in the forested belt unusually difficult, the forest remains sparsely populated, as in much of our Appalachian region. Many Americans unwisely pressed westward beyond the line of twenty inches of rainfall into the region of the steppe but were forced back because conditions of life were there too difficult. The inhabitant of the eastern forest still

enjoys advantages in the form of game, fish, and wild fruits practically unknown to the inhabitant of the steppe; and the western pioneer of today is as noted for his vigor and energy as was ever the clearer of the eastern forest.

TREATMENT OF NATURAL FRONTIERS

The authors' treatment of the subject of natural frontiers (pp. 354-361) is disappointing. They err in limiting the rôle of such frontiers to serving as protective barriers, with the result that their discussion is incomplete and their conclusions in part at least invalidated. Equally erroneous is their assumption that rivers and mountains have no value as military barriers, since they can be passed by determined armies (but at what a price!); and we read the surprising statement that "no European river has served efficaciously as a barrier." Surely they have not read aright the lessons of the Great War. They sometimes confound *mountains* with the line of the *watershed* in the mountains and fail to recognize that both in the recent war and in other historic struggles mountain barriers checked an invasion, even in cases where the invaders passed a short distance beyond the drainage divide. They overestimate the simplicity of the river as a basis for the demarcation of a boundary line and underestimate the difficulties resulting from shiftings of the river's course. These difficulties are real and serious, and they were so far taken into account at the Peace Conference of Paris that the location of more than one international boundary was in part determined by the necessity of avoiding the conflicts to which such changes of river courses give rise. And whether or not one agrees with Huntington's ideas as to the effects of climatic oscillations on human migrations, one will feel that Huntington's arguments are sufficiently serious to deserve a more adequate reply than contrary assertions unsupported by arguments or facts (pp. 227-228).

IMPOSSIBILITY OF NATIONAL ISOLATION

It would be wrong to overestimate the importance of these shortcomings. After all, they are matters which in no wise affect the validity of the large lessons the authors seek to teach, nor do they materially detract from the very high value of the treatise. They merely show that "*La géographie de l'histoire*" should be read carefully and intelligently. The important fact remains that it should be read, not only by geographers, but by every one who seeks light on the troubled problems confronting the world today, whose solution will make the history of tomorrow. All such readers will find Brunhes and Vallaux's work not only of absorbing interest but also of real service in clarifying their ideas on a variety of political and economic questions. And it is in no spirit of levity that we would commend certain pages of this valuable book to those members of the United States Senate who think the future weal of this country depends upon its adhesion to a policy of "splendid isolation." "It is not only an uninterrupted contiguity [of states] which is

thus established, it is also what we may call an uninterrupted *interdependence*, the threads of which will not loosen in the future; on the contrary they will never cease to grow tighter. Henceforth no state, large or small, can live within frontiers hermetically sealed. . . . Tomorrow there will be no isolation, splendid or otherwise, for any state, no matter how powerful or feeble it may be. The earth, grown too small, will no longer permit anyone to live unto himself. There will be, in the relations between states, a certain imperious obligatory compulsion, either toward co-operation or toward hostility, such as has not hitherto existed. . . . Tomorrow individual relations between states, either in peace or in war, will practically cease to exist. . . . In order to form an organism as strong and rich as possible, the states must co-operate in groups to the end that they may include within their federated territories the whole gamut of natural resources and manufactured products demanded by the growing complexity of social life. It is only through this interdependence, voluntarily established among some of their number, that peoples can escape the universal dependence, and consequently the inevitable subjection, that will be the fate of the isolated" (pp. 423-426).